## REMARKS

The foregoing amendment is made to eliminate multiple dependent claims.

Respectfully submitted,

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Peter L. Michaelson, Attorney

Reg. No. 30,090

Customer No. 007265

(732) 530-6671

MICHAELSON & WALLACE Counselors at Law Parkway 109 Office Center 328 Newman Springs Road P.O. Box 8489 Red Bank, New Jersey 07701

## \*\*\*EXPRESS MAIL CERTIFICATION\*\*\*

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Signature of person making certification

Peter L. Michaelson

Name of person making certification

(P2pamd/92/ks)

- 1 1. In situ produced macroporous biomedical
- 2 polyurethane-amide material based on chain extended
- 3 isocyanate terminated polyester prepolymer units, wherein
- 4 the said chain extension has been done with at least one
- 5 dicarboxylic acid or a hydroxy-carboxylic acid.
- 1 2. Polyurethane-amide according to claim 1, wherein the
- 2 material has a pore structure, wherein the amount of pores
- having a pore size of >450  $\mu$ m is less than 10% by volume.
- 1 3. Polyurethane-amide according to claim 1, wherein the
- 2 material has an open cell structure.
- 1 4. Polyurethane-amide according to claim 1, wherein the
- 2 said prepolymer is a prepolymer of soft polyester segments,
- 3 having a glass transition temperature below 40°C, said
- 4 prepolymer further optionally containing polyether-polyol
- 5 segments.
- 5. Polyurethane-amide according to claim 1, wherein the
- 2 material shows phase separation into hard an soft phases.
- 1 6. Polyurethane-amide according to claim 1, wherein the
- 2 polyester is based on a polyester prepared by ringopening
- 3 polymerisation, preferably a random copolyester.
- 7. Polyurethane-amide according to claim 6, wherein the
- 2 random copolyester is a copolyester of lactide, glycolide,
- 3 trimethylene carbonate and/or ε-caprolacton.

- 8. Polyurethane-amide according to claim 1, further
- 2 comprising an additional diol segment.
- 9. Polyurethane-amide according to claim 8, wherein the
- 2 said additional diol segment is a polyether or a polyester
- 3 segment.
- 1 10. Polyurethane-amide according to claim 8, wherein the
- 2 said diol segment is incorporated in the material during
- 3 the reaction of the prepolymer with the chain extender.
- 1 11. Polyurethane-amide according to claim 1, based on a
- 2 copolyester of lactide and  $\varepsilon$ -caprolacton containing 5 to 95,
- 3 preferably 40-60 % of units of lactide and 5 to 95,
- 4 preferably 40-60 % of units of  $\varepsilon$ -caprolacton, based on
- 5 number.
- 1 12. In situ produced macroporous biomedical
- 2 polyurethane-amide material based on chain extended
- 3 prepolymer units of biocompatible soft polyester segments
- 4 and on hard urethane-amide segments, said material having a
- 5 compression modulus of at least 100 kPa and a pore size
- 6 distribution less than 10 vol.% of pores having a pore
- 7 size > 450  $\mu$ m.
- 1 13. Macroporous biomedical polyurethane-amide according to
- 2 claim 12, showing phase separation between soft and hard
- 3 segments.

- 1 14. Macroporous biomedical polyurethane-amide according to
- 2 claim 12, having an open cell structure.
- 1 15. Macroporous biomedical polyurethane-amide according to
- 2 claim 12, said material being biodegradable.
- 1 16. Process for the preparation of a macroporous
- 2 biomedical polyurethane-amide according to claim 1, said
- 3 process being solvent free and comprising preparing an
- 4 isocyanate terminated polyester prepolymer, mixing the
- 5 prepolymer with at least one chain extender selected from
- 6 the group of dicarboxylic acids and hydroxycarboxylic
- 7 acids, reacting the mixture to produce the macroporous
- 8 biomedical polyurethane.
- 1 17. Process according to claim 16, wherein the said chain
- 2 extender is adipic acid.
- 1 18. Process according to claim 16, wherein the prepolymer
- 2 is mixed with salt crystals of a required particle size to
- 3 assist in the generation of suitable pores, and leaching
- 4 out the salt crystals after the chain extension has been
- 5 completed.
- 1 19. Process according to claim 16, wherein the chain
- 2 extension is performed in the additional presence of a
- 3 diol.

- 1 20. Process according to claim 16, wherein a nucleant is
- 2 present during chain extension, said nucleant preferably
- 3 being either powdered adipic acid, also acting as chain
- 4 extender, or a powdered inert material.
- 1 21. Process according to claim 16, wherein during the
- 2 chain extension the reaction mixture is treated
- 3 ultrasonically.
- 1 22. Process according to claim 16, wherein the reaction
- 2 mixture also contains a surfactant.
- 1 23. Macroporous biomedical polyurethane-amide material
- 2 according to claim 1 for use in human or veterinary
- 3 surgery, as implant or repair material.
- 1 24. Implant or reconstruction material in human or
- veterinary surgery based on the biomedical
- 3 polyurethane-amide according to claim 1.
- 1 25. Porous scaffold for repairing meniscal lesion,
- 2 comprising the macroporous biomedical polyurethane-amide
- 3 according to claim 1.
- 1 26. Macroporous biomedical polyurethane-amide material
- 2 produced in accordance with the process of claim 16 for use
- in human or veterinary surgery, as implant or repair
- 4 material.

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- 1 27. Implant or reconstruction material in human or
- 2 veterinary surgery based on the biomedical
- 3 polyurethane-amide produced in accordance with the process
- 4 of claim 16.
- 1 28. Porous scaffold for repairing meniscal lesion,
- 2 comprising the macroporous biomedical polyurethane-amide
- 3 produced in accordance with the process of claim 16.